

## REMARKS

1. Reconsideration and further prosecution of the above-identified application are respectfully requested in view of the amendments and discussion that follows. Claims 38-48 are pending in this application.

The title of the application has been objected to. The claims have been objected to. Claims 38, 39, 41 and 41-48 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 5,160,891 to Keren. After a careful review of the specification and claims (as amended), it has been concluded that the rejections are in error and the rejections are, therefore, traversed.

2. The title has been objected to. In response, the title has been amended.

3. The claims have been objected to. In response, claim 40 has been amended to correct the dependency.

4. Claims 38, 39, 41 and 41-48 have been rejected as being anticipated by Keren. In response, independent claims 38 and 41 have been further limited to "exciting a plurality of atoms having different atomic weights with the generated signals". Support for the plurality of atoms of different atomic weights can be found within the specification at page 6, lines 6-28 based upon the irradiation of hydrogen-1 and oxygen-17. Further support may be found in other parts of the specification (e.g., page 10, line 1 to page 11, line 5).

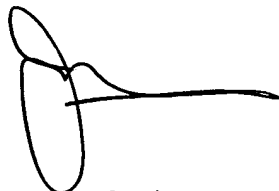
Keren fails to provide any teaching regarding the claim invention on any of a number of different levels. On a first level, Keren is limited to the processing of received signals. As clearly shown in FIGs. 1, the signals are received by an RF coil 12, 13, 14, 15 and progress from the left to the right. A reader would understand this to necessarily be the case since the amplifiers (e.g., 22, 23, 24, 25) are all oriented to transmit signals from left to right. As such, Keren provides no teaching at all regarding the step of "exciting a plurality of atoms with different atomic weights with the generated signals".

On another level, Keren is limited to processing signals from a single species of atom. A person of ordinary skill in the art would know this to necessarily be the case since the description refers to signal processing of a single Larmour frequency (i.e., "the Larmour frequency at the center of the magnet", Keren, col. 4, lines 4-5). Since an atom only has a single Larmour frequency and since Keren is directed to a single Larmour frequency, Keren fail to provide any teaching of any excitation of a plurality of atoms having different atomic weights or enhancement of an MRI signal based upon such excitation.

For any of the above reasons, Keren does not do the same or any similar thing as that of the claimed invention. Since Keren does not do the same or any similar thing as that of the claimed invention, the rejections are improper and should be withdrawn.

5. Allowance of claims 38-48, as now presented, is believed to be in order and such action is earnestly solicited. Should the Examiner be of the opinion that a telephone conference would expedite prosecution of the subject application, he is respectfully requested to telephone applicant's undersigned attorney.

Respectfully submitted,  
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